CLAIMS

Listing of claims:

1. (Original) Miniature MEMS microphone, comprising

a single-ended transducer element adapted to receive incoming acoustic waves and to convert a received incoming acoustic wave to an unbalanced first electrical signal, and

an amplifier adapted to receive the first electrical signal, and to generate a differential electrical signal being an amplified version of the first electrical signal, and to provide said differential electrical signal on a pair of terminals arranged on a substantially plane exterior surface part of the miniature MEMS microphone.

2. (Original) Miniature MEMS microphone according to claim 1, wherein the single-ended transducer element is mounted on a first surface of a silicon-based carrier substrate, and wherein a second surface of the silicon-based carrier substrate forms the substantially plane exterior surface part.

3. (Original) Miniature MEMS microphone according to claim 2, wherein the first surface is substantially plane and substantially parallel to the second surface.

4. (Original) Miniature MEMS microphone according to claim 2, wherein the amplifier is mounted on the first surface of the silicon-based carrier substrate.

5. (Original) Miniature MEMS microphone according to claim 2, wherein the amplifier is monolithically integrated with the silicon-based carrier substrate.

6. (Original) Miniature MEMS microphone according to claim 2, wherein the single-ended transducer element is silicon-based.

7. (Original) Miniature MEMS microphone according to claim 2, wherein the amplifier is formed on a silicon-based substrate.

8. (Original) Miniature MEMS microphone according to claim 3, wherein the single-ended transducer and the amplifier are integrated on a silicon-based substrate.

9. (Original) Miniature MEMS microphone according to claim 1, further comprising a housing having an acoustical inlet opening aligned with the single-ended transducer element.

10. (Original) Miniature MEMS microphone according to claim 1, comprising a plurality of single-ended transducer elements adapted to generate unbalanced electrical signals in response to incoming acoustic waves, each of the plurality of unbalanced electrical signals being received by separate amplifiers adapted to provide differential amplified versions of the plurality of unbalanced electrical signals on separate pairs of terminals arranged on the substantially plane exterior surface of the miniature MEMS microphone.